

“Wellhead Reformer for Electricity Production and Other Applications”

Submitted by:

Novorocs Technologies, LLC and Blaise Energy Inc.

- ☐ **Request for - \$270,110; Total Project Costs - \$540,220**
Project Duration: 3 months

PROJECT DESCRIPTION

The proposed project will demonstrate the economic and environmental benefits of reforming heavy hydrocarbon wellhead gas, as typically found in the Bakken, to pipeline quality natural gas for electricity and CNG production, and emissions reduction. The project has the following objectives:

- Construct and demonstrate on a Bakken well site, provided by Halcon Resources, a reforming system that converts heavy hydrocarbon wellhead gas to pipeline quality natural gas using Novoroc's proprietary selective catalytic reforming technology.
- Operate a natural gas generator provided by Blaise Energy on the resultant reformed stream at full power without engine knock.
- Clean and compress natural gas for use in a compressed natural gas vehicle as provided by Blaise Energy
- Demonstrate emissions reductions on a natural gas generator and natural gas burner, compared with direct combustion of wellhead gas and/or diesel fuel.
- Quantify and disseminate the operational, economical, and emissions benefits of reforming wellhead gas before utilizing it in subsequent applications.

Technical Reviewers' Rating Summary					
		Technical Reviewer			
Statement	Weighting Factor	<u>G-40-05A</u>	<u>G-40-05B</u>		<u>Average Weighted Score</u>
Objectives	9	3	4		31
Achievability	7	2	3		17
Methodology	8	3	3		24
Contribution	8	2	3		20
Awareness / Background	5	3	4		17
Project Management	3	2	3		7
Equipment / Facilities	2	2	3		5
Value / Industry-Budget	4	3	4		14
Financial Match – Budget	4	3	4		14
Average Weighted Score		130	172		151
Maximum Weighted Score			250 possible points		

TECHNICAL REVIEWER TOTALS

- G-40-05A

Average Weighted Score: 130 out of 250

FUNDING TO BE CONSIDERED

- G-40-05B

Average Weighted Score: 172 out of 250

FUND

DIRECTOR'S RECOMMENDATIONS

To Fund in the amount of \$270,110